

Environmental Protection Division

NATIONAL	LABORATORY 1.1943 —	ESH&Q Doc. #: ENV-Group: EAQ Doc. #: ESHQ-08-047	Other:					
		Is this a response to an action item? Yes	s No X					
		E Mail Door Door Letter X	08/05/2008 08/14/2008					
Го:								
	Compliance Repo	orting Manager, Air Quality Bureau, New Me	xico Environment	Department				
Subject:	Semi-Annual One	erating Permit Monitoring Report(January-	June 2008)					
Action: Review and Endorse								
Background: See form 1824								
ssues:	Sues: See form 1824							
Authoriz	ing Official	Name	Approved Yes No	Date				
From								
Author		David Paulson		8/6/08				
Group/Deputy	Group Leader	Dianne Wilburn		See Form 1824				
Division Leade	er	Victoria A. George	11	See Form 1824				
Associate Dire	ctor	Richard S. Watkins		See Form 1824				
ADC Review	and the second s	Steve Story		8/1/08				
Security Revie	w (S-7)	,						
	C-LESH Review Phil Wardwell See Form 1824 Dordinated with Facility or ogram							
Comments and	d/or Special Instr	uctions:	, ,	,				
		Group Office Use Only						
Completed Fin	al Distribution		N					
Distributed To	: IRM-RMMSO, A	150						



Signature/Review/Coordination Sheet

This form is to accompany all documents requiring review, approval, or signature by the Laboratory Director or Designee.

Date 8/05/08	Deadline 08/14/08	Is this a response to an action item? Yes No No						
From:	00/14/00	1000 (200) (
Name: David L. Paulse	on MS: J978	✓ Call for Pick-up Name: David L. Paulson Phone: 665-8884						
		Traine. Barra B. Fuaison Friends 666 6667						
	nt, briefly describing subject matter.							
Semi-annual Monitoring	g Report (January - June 2008), Air Qua	ity Operating Permit P100-M2						
	formation Only							
Background/Issues:	g vaport raquired under Parmit Candition	1 4.2. This report is required to address all monitoring activities, ar						
		I (period ends June 30, 2008, report due August 14, 2008 to NMEE						
- 5								
ACTION requested of Laboratory Director or Designee:								
Review and endorse correspondence to NMED.								
	-							
		" with all correspondence. This is not an attachment.						
	eport cernneins by a	DESH+Q (per discussions ~/ NMED-AQB).						
PAD Endorsement Name (print)	Signature	Date						
,		45						
AD Endorsement Name (print)	Signature	Date						
Richard S. Wa	atkins	8/7/68						
Coordinated with	Cignoturo	Date						
1. Name (print)	Signature	9/2/08						
Victoria George,		0/1/00						
2. Name (print)	Signature	Date						
Phil Wardwell, I								
3. Name (print)	Signature	Date						
Dianne Wilburn, I	ENV-EAQ Manne	William 8/7/08						
4. Name (print)	Signature	Date						
5. Name (print)	Signature	Date						
267 E	e [®]							
Diagram	to inter/intro Diverte vete/Divisional acco	rdination and review prior to submittal to the Director's Office.						

Please ensure appropriate inter/intra Directorate/Divisional coordination and review prior to submittal to the Director's Office.

Form 1824 (1/07)

wardwell@lanl.gov, 01:17 PM 08/07/2008, Re: Review of Monitoring Report

X-Sieve: CMU Sieve 2.2

X-CTN-5-Virus-Scanner: amavisd-new at mailrelay2.lanl.gov

Subject: Re: Review of Monitoring Report To: Dave Paulson
Apaulson@lanl.gov

X-Mailer: Lotus Notes Release 6.5.1 January 21, 2004

From: wardwell@lanl.gov

Date: Thu, 7 Aug 2008 13:17:48 -0600

X-MIMETrack: Serialize by Router on WPCMail03P/LANL(Release 7.0.3|September 26, 2007) at

08/07/2008 01:17:50 PM

X-CTN-5-MailScanner-Information: Please see http://network.lanl.gov/email/virus-scan.php

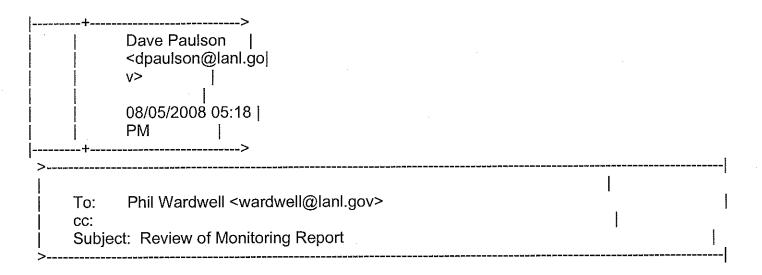
X-CTN-5-MailScanner: Found to be clean

X-CTN-5-MailScanner-From: wardwell@lanl.gov

X-Spam-Status: No

Dave - After reviewing the report and discussing it with you, I approve. I think the report is fine.

Phil Wardwell
Office of Laboratory Counsel
Environment, Safety and Health Practice Group
Mail Stop A 187
Telephone 505 667 3766
Fax 505 665 4424



Phil.

Would you please review the attached monitoring report and provide comment/approval. If you approve of the report, please provide me with an e-mail stating such so I can include it with the report package to be signed. If you have any questions, please do not hesitate to contact me.

Thank you, Dave



New Mexico Environment Department Air Quality Bureau **Compliance and Enforcement Section** 1301 Siler Road Building B Santa Fe, NM 87507 Phone (505) 476-4300 Fax (505) 476-4375



Date Reviewed:

	07.03.08									HOE ONLY		
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TEMP									Admin			
	NOTE: ® - Indicates required field						-10.		Massimis			
	ION I - GENERAL COM	PANY AND FA	ACILIT	Y INFO						9		
	ompany Name: mos National Security				D. ® Facility Name: Los Alamos National Laboratory							
B.1 ® C	Company Address:				E.1 ® Fa Same as							
P.O. Bo MS J97					Same as	Comp	arry					
B.2 ® C	City:		4 ® Zip: 7545		E.2 ® C	ity:			E.3 ® State:	E.4 ® Zip:		
C.1 ® Co	ompany Environmental Contact: Wilburn	C.2 ® Title: EAQ Group Lea	C.2 ® Title: F.1 ® Facility Contact: Steve Story					nce Team Leader				
C.3 ® P 505-667	hone Number: '-6952	C.4 ® Fax Num 505-665-8858	nber:		F.3 ® Ph 505-665-		lumber:		F.4 ® Fax 1 505-665-88	The state of the s		
	Email Address: @lanl.gov				F.5 ® Ei story@la							
	i. Responsible Official: (Title V onlv): Richard S. Watkins H. Title: Associate Director ESH&Q 505-667-4218					J. Fax Num 505-665-38						
		ermit Number:		tle V Permi	it Issue Date:	N.	NSR Permit N	Number:	((T) 40(T) ((30(T) 3) ((30(T)	R Permit Issue Date:		
10.000	orting Period:	6/30/2008). Proposed	- 0577	(0.0.00)	OR	R. Actual Tes	t Date:		
						THE SECURIOR						
	SECTION II – TYPE OF SUBMITTAL (check one that applies) A Title V Annual Compliance Permit Condition(s): Description:											
A. 🗌	Certification									ii Maanina si araanina saadhaan		
в. 🖂	Title V Semi-annual Monitoring Report	Permit Conditio All Monitoring	n(s):	Descript LANL Se		/lonitor	ing Report Ja	nuary-Ju	ne 2008			
c. 🗀	NSPS Requirement (40CFR60)	Regulation:		Section	(s):		Description:					
D. 🔲	MACT Requirement (40CFR63)	Regulation:		Section	(s):	***************************************						
E. 🗌	NMAC Requirement (20.2.xx) or NESHAP Requirement (40CFR61)	Regulation:		Section	(s):	Description:						
F. [Permit or Notice of Intent (NOI) Requirement	Permit No.□: or N	IOI No.□:	Condition	on(s):		Description:			9		
G. [Requirement of an Enforcement Action	NOV No. ☐: or SF or CD No. ☐: or C		Section	(s):		Description:					
SECTI	ON III – PERIODIC EMI	SSIONS TEST	NOTII	FICATION	ONS. TES	T PR	OTOCOLS	AND T	EST REPO	RTS (if applicable)		
	A. Test Report CMT:	B. Test Protoc		. Notification					mission Units			
т. 🗆 🗀												
SECT	ION IV - CERTIFICATION	DNI .										
	easonable inquiry, I	Richard S. Wa (name of reporting		с	ertify that th	e info	rmation in thi	is submi	ittal is true, ac	curate and complete.		
® Sign	ature of Reporting Official:	®	Title:		NI O	® Da		0.0	e Official for Title	1 		
7	Mocker	A	ssoc. Di	rector ES	SH&Q	8/	7/06	X Yes		∐ No		
	₫.											

Reviewed By:



Environmental, Safety, Health & Quality PO Box 1663, MS K491 Los Alamos, New Mexico 87545 505-667-4218/Fax 505-665-3811

Date: August 7, 2008 Refer To: ESH&Q-08-047

Compliance Reporting Manager New Mexico Environment Department Air Quality Bureau 1301 Siler Road, Building B Santa Fe, New Mexico 87507

SUBJECT: SEMI-ANNUAL MONITORING REPORT FOR JANUARY – JUNE 2008

AIR QUALITY TITLE V OPERATING PERMIT P100-M2

IDEA ID No. 856 – Los Alamos National Laboratory (LANL)

Dear Compliance Reporting Manager:

Enclosed is Los Alamos National Laboratory's Title V Operating Permit Semi-Annual Monitoring Report for the period **January 1** – **June 30, 2008** (Enclosure-1). This submission is required by permit condition 4.2 of Operating Permit P100-M2 and is being submitted within the allowed 45 days after the end of the reporting period as specified in permit condition 4.3. No deviations were identified during this reporting period.

If you have any questions or comments regarding this submittal or would like to discuss the submittal in greater detail, please contact Steve Story at 665-2169 or David Paulson at 665-8884.

Sincerely,

Richard S. Watkins

Associate Director, ESH&Q

chard & Wackens

DLP

Enc: a/s

- Cy: M. Mallory, w/o enc., ADPADOPS, A102
 - S. Fong, w/o enc., DOE-LA-AO, A316
 - P. Wardwell, w/o enc., LC-ESH, A187
 - D. Wilburn, w/o enc., ENV-EAQ, J978
 - S. Story, w/o enc., ENV-EAQ, J978
 - D. Paulson, w/o enc., ENV-EAQ, J978
 - J. Stanton, w/o enc., SSS-AE-V02, A199

ENV-DO FILE

IRM-RMSSO, A150

ENV-EAQ Title V Monitoring Report File

Enclosure - 1

Los Alamos National Laboratory's
Title V Operating Permit
Monitoring Report for the period
January 1 – June 30, 2008

Title V Report Certification Form

I. Report Type					
☐ Annual Compliance Certification					
⊠ Semi-Annual Monitoring Report					
☐ Other Specify:	Sec. Sec. Consider the day of proceedings of the		er Jenskinsta		
II. Identifying Information				SASA SASA SASA SASA SASA SASA SASA SAS	
Facility Name: Los Alamos National Laboratory					
Facility Address: P.O. Box 1663, MS J978, Los Alamos	State: NI	М	Zip	: 87545	
Responsible Official (RO): Richard S. Watkins	Phone	: 505-667-42	218	Fax: 505-665-3811	
RO Title: Assoc. Director Environmental, Safety, Health, and	Quality	RO e-mail:	rsw	atkin@lanl.gov	
Permit No.: P100M2	Date Per	mit Issued: .	July	16, 2007	
Report Due Date (as required by the permit): 08/14/2008	Permit A	AI number: 8	56		
Time period covered by this Report: From: January 1, 200)8	To: June	30, 2	2008	
III. Certification of Truth, Accuracy, and Comple	eteness				
THE CONTRACTOR ASSESSMENT OF THE PROPERTY OF T			600		
I am the Responsible Official indicated above. I, (Richard S. Watkins) certify that I meet the requirements of 20.2.70.7.AD NMAC. I certify that, based on information and belief formed after reasonable inquiry, the statements and information contained in the attached Title V report are true, accurate, and complete.					
Signature Ruhard & Ucl	Date: 8 /-	7/08			

LA-UR-08-05152

Approved for public release; distribution is unlimited.

Title:

Semi-Annual Monitoring Report January 1 - June 30, 2008 Air Quality Operating Permit P100M2 Los Alamos National Laboratory

Author(s):

David Paulson, ENV-EAQ

Intended for:

Compliance Reporting Manager New Mexico Environment Department - Air Quality Bureau 1301 Siler Road, Building B Santa Fe, New Mexico 87507



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Title V Semi - Annual Monitoring Report for Permit P100M2

Part 1 - Monitoring Activity Reporting Requirements

4.0 REPORTING

Conditions of 4.0 are pursuant to 20.2.70.302.E NMAC.

- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.
- 4.3 The report required by Condition 4.1 shall be submitted within 90 days from the end of the reporting period. The semiannual report required by Condition 4.2 shall be submitted within 45 days from the end of the reporting period. The reporting periods are January 1st to June 30th and July 1st to December 31st. This condition is pursuant to 20.2.70.302.E.1 NMAC.
- 4.4 The permittee shall submit reports of all deviations (including emergencies) from permit requirements to the Department when they occur. The permittee shall communicate initial notice of the deviation to the Department within twenty-four (24) hours of the start of the first business day following the start of the occurrence via telephone or facsimile. Within ten (10) calendar days of the start of the first business day following the start of the occurrence, written notice using the Excess Emissions Form (attached to this permit) shall be submitted to the Department. This condition is pursuant to 20.2.70.302.E.2. NMAC.

Specific Monitoring Reports:

2.1 Asphalt Production

- 2.1.4 Emissions Monitoring Requirements
- 2.1.4.1 Perform monthly six (6) minute opacity readings for each emission point having opacity greater than zero as determined by EPA Method 22.
- 2.1.4.2 Monitor the differential pressure (inches of water) across the baghouse by the use of a differential pressure gauge, in accordance with condition IV.C.2 of NSR permit number GCP-3-2195G.
- 2.1.4.3 40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.

Reporting Requirement

- 2.1.6 Reports shall be submitted in accordance with conditions 4.1 and 4.2.
- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

Yes Date report submitted:

Tracking Number:

No Provide comments and identify any supporting documentation as an attachment.

Comments:

- 2.1.4.1 See **Attachment 1** for monthly opacity reports. Monthly six minute opacity readings are taken using the required EPA Methods.
- 2.1.4.2 A differential pressure gauge is in place to continuously monitor the differential pressure across the baghouse as required by NSR permit GCP-3-2195G condition IV.C.2. The differential pressure is recorded twice each day during operations. This is consistent with NSR permit GCP-3-2195G condition IV.D.2(e). Records are available on-site for NMED inspection.
- 2.1.4.3 LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

Attachment 1 Asphalt Plant Opacity Reports

Summary Table, Reports Attached

Month	Read Location	Date	Time	Average Opacity	EPA Method
January	Top of Shaker	01/15/08	9:07 am	0	9 ^(a)
February	Top of Shaker	02/12/08	8:46 am	0	9 ^(a)
March	Top of Shaker	03/05/08	8:34 am	0	9 ^(a)
April	Top of Shaker	04/01/08	8:42 am	0	9 ^(a)
May	Top of Shaker	05/13/08	8:40 am	0	9 ^(a)
June	Top of Shaker	06/03/08	12:55 pm	0	9 ^(a)

(a) EPA Method 9 was used. Average opacity for the Asphalt Plant is the sum of the highest consecutive 24 readings divided by 24 (6 minutes of readings). The method is in accordance with 20.2.61 NMAC and conditions 2.1.4.1 and 2.1.4.3 of the Los Alamos National Laboratory (LANL) Operating Permit P100M2.



LOS ALAMOS NATIONAL LABORATORY (LANL) VISIBLE EMISSION OBSERVATION FORM (6 MINUTE)

Source Name:			Observation Date Start Time End Time						
1	LANITA	onhalt Dlaut	- 1			-		Time	End Time
Sauce I and	LWIND W	sphalt Plant		1-15	-08		09	07	0913
Source Location		Serial Harrisa Aug	- 1	Sec		1	1		T
	TA-60 (S	Sigma Mesa)		Min	10	15	30	45	Comments
Type of Source		T) pe of Control Equipment	\neg	1					The state of the s
Asph	alt Plant	Baghouse			10	D	12	2	
Describe Emiss	sion Point (Top of sta	ack etc.)	\dashv	2	10	0	0	-	
						0	10	0	
107 R	OF SUA	KER STACK Height Relative to Observer		3	10	0	1	-	
Herkut Voove	/// Feet	Height Relative to Observer	- 1		1-		12	1	
	72	45 Feet	- 1	4	0	0	0	n	
Distance From	Observer	Direction of Source From Observer		24		-	1	0	
	55 Feet	1/1/		5	10	0	0	D	
Description of	Plume (stack exit onl	ZVW	4	,			-	-12	
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ENV-EAQ-307, R3, ATTACHMENT 2 (OPACITY DETERMINATION AND EXCESS EMISSIONS REPORTING)



LOS ALAMOS NATIONAL LABORATORY (LANL) VISIBLE EMISSION OBSERVATION FORM (6 MINUTE)

Source Name:	Observation Date Start Time				Time	End Time	
LANL A	sphalt Plant	2-12-	08	(08	146	0852
Source Location:	Sigma Mesa)	Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1	D	0	D	0	
Asphalt Plant	Baghouse	2	0	0		0	
Describe Emission Point (Top of sta	ack, etc.)		0	\mathcal{D}	0	10	
Height Above Ground Level	Height Relative to Observer	3	0	0	0	0	
45 Feet	45 Feet	4	0	0	0	0	
Distance From Observer	Direction of Source From Observer	5	0	2	n	0	
7 /	NN	6		0	0	0	
Description of Plume (stack exit on □Lofting □Trapping □Loopin		Marie Single Conf.	0	10	0	0	
No Plume Present		7					
Emission Color Plume Typ BM / 5/100 Water Droplets Present?		8					
Water Droplets Present? □NO ZYES If YES, droplet plun	ne is □Attached	9					
At what point in the plume was opa		10					
Describe Background (i.e. blue sky	pot stack	11					
Blue 5KU	12						
Background Color	13					L	
Wind Speed Wind Dire	Clear						
2-6 mph (provide fi	rom/to, i.e. from North to South)	14					
tron	Relative Humidity	15					
1 10	Q-	16		15			
Additional Comments/Information:	a. "+)	17					
the semission	vomas clear	18					
$u = z^*$	*	19					
Stack SOURCE L	AYOUT SKETCH	20					
with Q Plume	Draw Arrow in	Average 6-M	inute O	pacity			of Opacity Readings
ı Em	ission North Direction	1 8	%			Min.	% Max. 0%
Sun 🕀 P	oint (1)	OBSERVER	(please	print)			
Wind — (\otimes	Name:	1			Title:	
		Don -	Ton	er_		EN	Date
		Signature	/	1			
	*	Home .	57	01	<u> </u>		2-12-08
		Observer Org	ganîzáti	on			le l
		X5L					
ار	OBSERVER'S POSITION	Certified by					Certification Date
	140	ETA					8-29-07
SUN LOCA	ATION LINE	•					

ENV-EAQ-307, R3, ATTACHMENT 2 (OPACITY DETERMINATION AND EXCESS EMISSIONS REPORTING)

5									
 Los Alamo 		LOS ALAN	ALCOITAG 2014	LABORATO	RY (L	.ANL)		
Source Name:	1	TSIBLE EM	ISSION OBSERV			IINU	re the by the later of		
Source Name:	110		2. /-	Observation Do		0	Start	34	End Time 40 X
Source Location		HAUT F	LANT	Sec Sec	10	<i>3</i>	0)	37	0857
7	TA-601	5,9ma	Mesa	Min	0	15	30	45	Comments
Type of Source	11. 21 6	1	ol Equipment	1 1	0	0	0	0	
HS DAA /	ion Rount (Top of s	Bagh	ouse	2	10	2	2		
100 B	f 54a		tack	3	10	0	0	0	
Height Above C	Feet	Height Relative t	to Observer	1 4	1	0	2		
Distance From	Observer	Durection of Sour	rge From Observer	5	10	10	0	10	
	70 Feet	NW	/		10	0	12	12	
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	SUN LOC	ATION LINE							

THIS FORM IS FROM EAQ-307, R4

LOS ALAMOS NATIONAL L VISIBLE EMISSION OBSERVA						
	O'eterwhen Da	16		Start		End Time
LANL HEPHALT PLANT	4-1-	0	8	02	4-7	0848
TA-LOD (SIGMA MESA) ASPHALT PLANT BASHOUSE	Min Sec	÷	15	30	45	Commens
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HSPHALT PLANT BASHOUSE. Before Engraving Found to a district exc.	2	Õ	1)	0	0	
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	6	0	10	0	0	
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Emprejon Color Knone Type XX No Plante Present Communication Communication Fragility International	8					
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All Emission peins are	18					
	19					
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A Committee of the Comm	271		-	-		
SUN FOCULION FINE						

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- Los Alam	os .	LOS ALAM	OS NATIONAL SION OBSERV	LABOR	(OTA)	RY (L	ANL)				
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LANL	ASPUAL	T PLAN	_	5-	No.	-0	8		40		0	
Source Location	0	10	<u> </u>	Min	Sec	C	15	30	45	1		
TA-60 Type of Source	(Sign	12 VICS	Economient	1	1	-	12	30	43	Comment	.5	
Asphalt	Plant	Bach		11-		0	0	0	0			
Describe Enuss	ien Point (Top of s	tack, etc.)	1	l	2	0	D	0	0			
Height Above (f Shake	Height Relative to	Dheerver E		3	0	2	2	0			
	45 Feet		45 Feet		4	D	0	0	0			
Distance From	Observer D Feet	Direction of Source	From Observer		5	0	0	0	0			
Description of I	Phone (stack exit o	nly)	***************************************		6	0	0	0	0			
□Lofting □T No Plume Pre	rapping ⊏Leopii ecen:	ng DFmung C	Coung		7						gie j	
Emission Color		pe ■No Plume 3 acus □ Fugitive	resent Ointernuttent		8							
Water Droplets	Present? If YES, droplet plu	me is CAmaked C	Detached)			MA				
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Describe Backe	Describe Background (i.e. blue sky, tites, erc.)				1							
Blue	Blue sky				2							
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4	F	Ketative Humany	33.	1	6	T OF						
Additional Com	ments Information	points c	Lear	1	7			1	- KE 2			
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		=		1	9							
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		OBSERVER'S PO	OSITION	Certifi	ed by					Certification D	late	
		10		FT	4					2-27-0	08/ I	
	SUN LOCA	ATION LINE		U _{mpress}	-		-				-541	

THIS FORM IS FROM EAQ-307, R4

Los Alamos LOS ALAMOS NATIONAL I						
VISIBLE EMISSION OBSERVA	the second secon	-	TIVE	-		
LANL Asphalt Plant	Observation Da		3	5000 T	55	End Trate 1301
TA-60 (319mo, Mesa)	Sec Min	0	15	30	45	Comments
Type of Source Type of Country Equipment	1	0	0	0	0	
Hebbalt Plant Baghouse Beloite Engrish Pont Top of God, etc.	.2	0	0	0	0	
Top of shaker stack	3	0	n	0	0	
Engli Apove Ground Level Height Relative to Observer 45 Feet Feet	4	0	0	0	0	
Distance From Observer Distance From Observer Distance From Observer	5	0	0	0	0	
Description of Phone estack exit only) Blothing Blothing Eleophing Blothing Blothing	6	0	0	0	0	
₩ Plante Present	7		272-410-11-27-11-2			
Emission Color Plume Tope ANo Plume Fretein	8					
Water Discipler: Present MNO CIVES RIVES, doubler plume is Clarifold Il Detailed	9					
At what penn in the plume were opacity determined	10					
Describe Background () e. elige sky neer etc.	11					
Blue 5KB	12					
Background Color Sky Configurer Style Color	13					
Wind Speed Wind Direction Wind Direction Wind Direction	14					
From W	15					
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Additional Comments Information Points Clear	17		M.F			, (15.00)
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	19					
500k SOURCE LAYOUT SKETCH	20					
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Sun 4 Emercon North Jifethen Peter	OBSERVER	olenia.	oriet:			% Man 5%
Wad — 🛈	Z'aure	.)	p		Tule:	10
	Stanague	ton	0		<u>E-110</u>	Date Date
	District Org.	Suzalis] Dn	_		6-3-08
	X52					
GBSERVER'S POSITION	Certified by					Cestification Date
	ETA					2-27-08
STATIONAL NE						

2.2 Beryllium Activities

Source	Monitoring Required
Chemistry and	A log shall be maintained during operations which indicates the number of
Metallurgy Research	Be samples processed.
Facility	2 9
TA-3-29	
Sigma Facility	A log shall be maintained during operations which shows the number of
TA-3-66	metallographic specimens used in the polishing operation and the weight of
	Be samples processed in the electroplating/chemical milling, machining, and
	arc melting/casting operations.
Beryllium Test Facility	Facility exhaust stack will be equipped with a continuous emission monitor
TA-3-141	used to measure beryllium emissions.
	Cartridge and HEPA filters will be equipped with differential pressure
	gauges that measure the differential pressure across the cartridge and HEPA
	filters while the exhaust fans are in operation.
TA-16-207	Project files shall be maintained of components prepared for testing.
TA-35-87	A log shall be maintained during operations which shows the number of
	beryllium filters cut.
Target Fabrication	Records of the stack emission test results (see Condition 2 of NSR Permit
Facility	No. 632) and other data needed to determine total emissions shall be retained
TA-35-213	at the source and made available for inspection by the Department.
Plutonium Facility	The HEPA filtration systems shall be equipped with a differential pressure
TA-55-PF4	gauge that measures the differential pressure (inches of water) across the
	HEPA filters while the exhaust fans are in operation.
	Control efficiency shall be verified by daily HEPA filter pressure drop tests and annual HEPA filter challenge tests of accessible filters.

Reporting Requirement

Source	Reporting Required
Chemistry and Metallurgy Research Facility TA-3-29	See condition 4.2.
Sigma Facility TA-3-66	See condition 4.2.
Beryllium Test Facility TA-3-141	Anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date.
	Actual date of initial startup of each new or modified source within fifteen (15) days after the startup date.
	Provide the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date.
·	Notify the Department within 60 days after each calendar quarter of the facility's compliance status with the

	permitted emission rate from the continuous monitoring system.
	Provide any data generated by activities described in the Quality Assurance Plan (QAP) that will assist the Air Quality Bureau's Enforcement Section in determining the reliability of the methodology used for demonstrating compliance with the permitted emission rate within 45 days of such a request.
TA-16-207	See condition 4.2.
TA-35-87	See condition 4.2.
Target Fabrication Facility TA-35-213	See conditions 4.1 and 4.2.
Plutonium Facility TA-55-PF4	Stack emission test results and facility operating parameters will be made available to Department personnel upon request. Reports may be required to be submitted to the Department if inspections of the source indicate noncompliance with this permit or as a means of determining compliance.

- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

Yes Date report submitted: January 22, 2008 & April 28, 2008 Tracking Number: SBR20080004

No Provide comments and identify any supporting documentation as an attachment.

Comments:

- Chemistry and Metallurgy Research Facility (TA-3-29) This beryllium source was removed from Operating Permit P100M1 as requested by LANL. A letter from NMED-AQB amending the permit was dated July 16, 2007. This amendment resulted in the assignment of Operating Permit No. P100M2.
- <u>Sigma Facility (TA-3-66)</u> A log is maintained showing the number of metallographic specimens used in the polishing operation. Logs are maintained showing the weight of Be samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations. Logs are available on-site for NMED inspection.
- <u>Beryllium Test Facility (TA-3-141)</u> The BTF is equipped with a continuous emissions monitor to measure beryllium emissions. The monitoring system is operated in accordance with LANL Quality Assurance Project Plans and emission results are provided to NMED quarterly. Submissions for this period were

- provided to NMED in reports dated January 22, 2008 [ENV-EAQ:08-020] and April 28, 2008 [ENV-EAQ:08-105]. Cartridge and HEPA filters are equipped with differential pressure gauges that measure the differential pressure across the cartridge and HEPA filters while the exhaust fans are in operation.
- <u>TA-16-207</u> Project files are maintained of components prepared for testing. Files are available on-site for NMED inspection.
- <u>TA-35-87</u> A log is maintained showing the number of beryllium filters cut. The log is available on-site for NMED inspection.
- <u>Target Fabrication Facility (TA-35-213)</u> Records of stack emission test results are maintained on-site and are available for NMED inspection. Stack emission test results are used to determine total emissions from this facility.
- <u>Plutonium Facility (TA-55-PF4)</u> The HEPA filtration systems are equipped with differential pressure gauges that measure the differential pressure across the HEPA filters while the exhaust fans are in operation. Control efficiency is verified by daily HEPA filter pressure drop readings. Readings are recorded in the TA-55 Operations Center. Annual HEPA filter challenge tests of accessible filters are performed. Test results are summarized in **Attachment 2**.

Attachment 2 Beryllium HEPA Filter Tests Results

Summary Table, Reports Attached

Unit	Date	Pass/Fail
TA-55 (H-5-1430) (FF-852)	06/03/2008	Pass
TA-55 (H-5-1440) (FF-853)	06/03/2008	Pass

100 AREA GLOVEBOX EXHAUST IN-PLACE HEPA FILTER TESTING

ATTACHMENT A 100 Area Glovebox Exhaust FF-852 Data Sheet

	100 P	rea Glovebox Exha	ust FF-852 [Data She	et			
	LAS Calib Expiration	Date: (8.4.3)	Diluter Calibration Expiration Date	n e: <u>ON (A 6</u> (8.4.		ilution Ratio: (8.4.2)		
Step Number	Item FF-852							
9.1.12.2	Background concentration (part./cc)							
9.1.12.3	Upstream concentration (part./cc) 2.5 (C. V.) part. concentration							
9.1.12.4	Challenge aerosol	concentration between	n 2.00 x10 ⁶ and	d 2.71 x10	⁶ part./cc	more		
9.1.12.5	1 st stage downstre	am concentration (part	:./cc)		(6.325 x	Initials (101) part. concentration		
9.1.12.6	2 nd /3 rd stage down	stream concentration (part./cc)		3.531 XI	part. concentration		
9.1.12.7	1 st stage Penetrati	on < 5.0 x10 ⁻⁴ (efficience	cy ≥ 99.95%)		2.51	1 x 10-5		
9.1.12.8	2 nd /3 rd stage Penet	ration < 2.5 x10 ⁻⁷ (effici	iency > 99.999	975%)	2028	x lo-s		
9.1.13.3 9.1.13.4	Ensure all test port	ball valves are closed	and capped.		MA _{Initials}	Independent Verification		
So The State of th	Valve	Required Position	Initials	Indepen Verifica	dent	mocportuent vernication		
" Ala	HV-852-H	Closed and Locked	MWI	PT	don			
	HV-852-G	Closed	MINT	127				
4.7	HV-852-F	Closed	MINI	77	-			
An "	HV-852-D	Closed	MMT	Di				
	HV-852-C	Closed	mmt	カナ				
	HV-852-B	Closed	ment	DT		.6		
	HV-852-A	Closed	Min	AT				
	HV-852-AA	Closed	INV.MI	P				
Comments:	Step and Rea	Mr 35/3 353	: den 9	101	`. J.	Y		
102552A.	(ver invoco)	357 9113		1.00	中等	- ney in colder and		
Surveillance Personnel Notify C:	Signature SE that complete		OC On-duty supervisor	Sign	ature	0/6/08 Date		
System En		Box 6/11/				2 6 ₂₀₀₈		

100 AREA GLOVEBOX EXHAUST IN-PLACE HEPA FILTER TESTING

ATTACHMENT B 100 Area Glovebox Exhaust FF-853 Data Sheet

Date: 04/	23/04	LAS Calibration Da	te: <u>つ≲/⊃//⊅≒</u> Exp	er Calibration piration Date:	24/2		ution Ratio: 5		
Step (8	3.4.1) 		(8.4.3)		(8.4	.4)	(8.4.2)		
Number				FF-853					
9.2.12.2	Back	Background concentration (part./cc)							
9.2.12.3	Upst	Upstream concentration (part./cc)							
9.2.12.4			oncentration between 2	2.00 x10 ⁶ and	2.71 x x	k10 ⁶ part./c			
9.2.12.5	1 st si	tage downstream	n concentration (part./c	c)		1,2	part, concentration		
9.2.12.6			eam concentration (pa		11 11	1.16	25 XIÚ 1 part, concentration		
9.2.12.7			≤ 5.0 x10 ⁻⁴ (efficiency			اء با	8ULX 10 5		
9.2.12.8			tion $\leq 2.5 \times 10^{-7}$ (efficien		75%)	4	514410-8		
9.2.13.3 9.2.13.4			all valves are closed a		-	met Initials	P J Independent Verification		
3	Valve Required Position Initials Indepe								
4		HV-853-H	Closed and Locked	Topin	1.4	7			
A THE STREET		HV-853-G	Closed	FNM	1	7-			
The same		HV-853-F	Closed	JUINI	P	7			
A	- Sag	HV-853-D	Closed	MWA	P	7			
	6	HV-853-C	Closed	How	P	7			
		HV-853-B	Closed	IN N	P	T			
		₩V-853-A	Closed	Filly	P	T			
		HV-852-AA	Closed	1414	Pi				
Comments:	SHOY	and rec	1915 d 2/55	C.P WHZ	. 17	4V-35	AA is includ		
sheld rud	1 11	1- K51-4H	Becoun of 3500	cy'es a	2 17				
Surveillance Personnel Signature OC On-duty Supervisor Signature Notify CSE that complete and accepted surveillance is available for review.									
System E	System Engineer Boy Boy 6/11/08 Signature Date RECEIVED JUN 2 6 2008								

2.3 Boilers and Heaters

- 2.3.4 Emissions Monitoring Requirements
- 2.3.4.1 Emission units TA-21-357-1, TA-21-357-2, and TA-21-357-3: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.
- 2.3.4.2 Emission units TA-55-6-BHW-1 and TA-55-6-BHW-2: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.
- 2.3.4.3 40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.

Reporting Requirement

- 2.3.6 Reports shall be submitted in accordance with conditions 4.1 and 4.2.
- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report subm	ttal? Answer
Yes or No below.	

☐ Yes Date report submitted:

Tracking Number:

⊠ No

Provide comments and identify any supporting documentation as an attachment.

Comments:

- 2.3.4.1 The TA-21 Steam Plant was officially and permanently shut-down as of September 28, 2007. This information was communicated to NMED in a letter dated October 16, 2007.
- 2.3.4.2 Volumetric flow meters are utilized to measure the total amount of natural gas being used by units TA-55-6-BHW-1 and TA-55-6-BHW-2 on a monthly basis. Natural gas usage is summarized in **Attachment 3**.
- 2.3.4.3 LANL uses 40 CFR Part 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

Attachment 3 **Boilers and Heaters Natural Gas Usage**

2008 Small Boilers Data Entry / Gas Use

		, M	Metered Boile	ers					
		The state of the s	ler Gas Use (CF) ^(c)	TA-50-2 ^(d) (MSCF)	Total G	as Use ^(a)	Non-Metered Gas Use	12-Month Rolling Total for	
	Month	BHW-1B (B-602)	BHW-1B BHW-2B		(MSCF) (MMSCF)		(MMSCF)	all Small Boilers (MMSCF) ^(e)	
	January	3441	2		84,295	84.30	80.85	504.57	
	February	2075	8		65,798	65.80	63.71	504.27	
	March	1786	2		58,027	58.03	56.24	507.94	
	April	1175	951	HIMATINATION	40,942	40.94	38.82	504.67	
3	May	528	989		28,334	28.33	26.52	503.54	
	June	505	1340	1.2	17,402	17.40	15.56	507.41	
	July			100010000000000000000000000000000000000					
	August							V-C-S-S-S-S-S-S-S-S-S-S-S-S-S-S-S-S-S-S-	
-	September								
10	October								
	November								
	December								
	TOTAL	9510	3292	1.2	294,798	294.80	281.99	Permit Limit = 870	

2008 Non Metered Boiler Pool Capacity:	305.3	MMBTU/hr ^(f)	
Estimated Gas-Use per MMBtu rating Jan-June:		0.92	MMscf/MMBtu/hr
Estimated Gas-Use per MMBtu rating July-Dec:		0.00	MMscf/MMBtu/hr
Estimated Gas-Use per MMBtu - Annual		0.92	MMscf/MMBtu/hr

Definitions:

MMSCF= Million Standard Cubic Feet MSCF = Thousand Standard Cubic Feet

Metered/Non-metered: Metered boilers are those units that have unit specific volumetric flow meters for the boiler(s) only.

		(Gas Use No	n-Metered ^{(a}	(MMSCF)				
AIRS Stack #	015	016	017	018	019	020	021	024	Units
Location:	TA-48-1	TA-48-1	TA-48-1	TA-53-365	TA-53-365	TA-59-1	TA-59-1	TA-16-1484	Lab Wide
ID:	BS-1	BS-2	BS-6	BHW-1	BHW-2	BHW-1	BHW-2	Plant 5	Various
Design Rate ¹⁹ (MMBTU/hr)	5.336	5,335	7.140	7.115	7.115	5.335	5.335	12.700	250
Calculated Gas Use-Jan-June	4.929	4.928	6.595	6.571	6.571	4.928	4.928	11.731	230.813
Calculated Gas Use-July-Dec	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Calculated Gas Use-Annual	4.929	4.928	6.595	6.571	6.571	4.928	4.928	11.731	230.813

2.4 Carpenter Shops

- 2.4.4 Emissions Monitoring
- 2.4.4.1 The permittee shall maintain logs of the hours the carpenter shops are in operation.

Reporting Requirement

- 2.4.6 Reports shall be submitted in accordance with conditions 4.1 and 4.2.
- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ Yes	Date report submitted:	Tracking Number:	
⊠ No	Provide comments and id	ntify any supporting documentation as an attachment.	

Comments:

2.4.4.1 A log is maintained of the hours of operation for each of the carpenter shops. Hour readings are collected and recorded monthly from hour meters installed on each of the cyclone separators. Hours of operation are provided in **Attachment 4**.

Attachment 4 Carpenter Shop Hours of Operation

2008 TA-3 & TA-15 Carpenter Shops

TA-3	Data Entry	TA-3	Data Entry
	Hours of Operation ¹		Hours of Operation ¹
Month	TA-3	Month	TA-3
January	1.7	July	
February	1.0	August	
March	1.1	September	
April	3.3	October	
May	6.0	November	
June	3.7	December	
6 mo. Total	16.8	6 mo. Total:	0.0

TA-15	Data Entry	TA-15	Data Entry
	Hours of Operation ¹		Hours of Operation ¹
Month	TA-15	Month	TA-15
January	7.6	July	
February	9.8	August	
March	8.3	September	MY ASSESSMENT OF THE SEASON
April	14.4	October	
May	5.2	November	
June	6.4	December	
6 mo. Total	51.7	6 mo. Total:	0.0

Reference

Based on information provided monthly by the shop foreman from each shop.

Saws, drills, shaping and sanding equipment shall each not operate in excess of 4368 hours per year.

2.5 Chemical Usage

- 2.5.4 Emissions Monitoring/Recordkeeping Requirements
- 2.5.4.1 Maintain records of chemical purchasing through facility-wide chemical tracking system, and use the data to calculate the emissions on a semiannual basis in accordance with Condition 4.1.

Reporting Requirement

- 2.5.5 Reports shall be submitted in accordance with conditions 4.1 and 4.2.
- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal	Answer
Yes or No below.	

☐ Yes	Date report submitted:	Tracking Number:
-------	------------------------	------------------

No Provide comments and identify any supporting documentation as an attachment.

Comments:

2.5.4.1 Records of chemical purchases are maintained through LANL's facility wide chemical tracking system (ChemLog). The data is used to calculate emissions which are submitted in the Semi-Annual Emission Report.

2.6 Degreasers

- 2.6.4 Emissions Monitoring Requirements
- 2.6.4.1 Record the amount of solvent added to the degreaser and calculate the emissions on a semi-annual basis in accordance with Condition 4.1.
- 2.6.4.2 Complete checklist for work practice standards.

Reporting Requirement

- 2.6.6 Reporting
- 2.6.6.1 Submit notification of initial startup.
- 2.6.6.2 Submit a compliance report 150 days after initial startup.
- 2.6.6.3 Reports shall be submitted in accordance with conditions 4.1 and 4.2.
- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

Yes	Date repo	rt submitted:

Tracking Number:

No Provide comments and identify any supporting documentation as an attachment.

Comments:

- 2.6.4.1 Records are maintained of the amount of solvent added to the degreaser. This data is used to calculate emissions on a semi-annual basis. The Semi-Annual Emissions Report, containing the degreaser emissions, will be submitted within 90 days from the end of the reporting period in accordance with condition 4.3 of the operating permit. LANL's "Historical Solvent Usage Data" report for January 1 through June 30, 2008 is provided in Attachment 5.
- 2.6.4.2 The degreaser operations staff completes checklists for work practice standards. The checklists are available on-site for NMED inspection.

Attachment 5 Degreaser Solvent Usage

Historical Solvent Usage Data

The usage information for TA-55-DG-1 degreaser from Jan-01-2008 through Jun-30-2008 is displayed below.

General Degreaser Information

Degreaser

Type TA Building

Solvent

TA-55-DG-1 Cold Batch 55

Trichloroethylene

Date Measured	Initial Solvent Level (inches)	Volume Added (liters)		Volume Removed (liters)	Level Removed (inches)
Jan-07-2008	6.00	3.44	1.75	0.00	0.00
Feb-21-2008	7.25	0.00	0.00	14.25	7.25
Feb-26-2008	0.00	14.74	7.50	0.00	0.00
Mar-31-2008	7.25	0.00	0.00	0.00	0.00
Apr-09-2008	7.25	1.00	0.50	0.00	0.00
Apr-29-2008	7.25	2.00	1.01	0.00	0.00
Apr-30-2008	7.75	0.00	0.00	14.50	7.37
May-01-2008	0.00	14.50	7.37	0.00	0.00
May-13-2008	7.25	1.00	0.50	0.00	0.00
May-28-2008	7.75	0.00	0.00	0.00	0.00
Jun-05-2008	7.50	0.00	0.00	14.00	7.11
Jun-10-2008	0.00	14.74	7.50	0.00	0.00
Jun-30-2008	7.25	0.50	0.25	0.00	0.00

2.7 Internal Combustion Sources

2.7.4 Emissions Monitoring Requirements

Source	Monitoring Required		
Stationary Standby Generators	Track and record hours of operation for stationary standby generators on a semi-annual basis.		
	Track hourly and 12-month rolling total kWh.		
TA-33-G-1	Record hours of operation and the time operation begins and ends each day.		

2.7.4.1 40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.

Reporting Requirement

- 2.7.6 Reports shall be submitted in accordance with conditions 4.1 and 4.2.
- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ Yes	Date report submitted:	Tracking Number:	
⊠ No		supporting documentation as an attachment.	

Comments:

- 2.7.4 (Stationary Standby Generators) LANL tracks and records generator hours of operation on a semi-annual basis. Stationary generator hours of operation for this reporting period are provided in Attachment 6.
- 2.7.4 (TA-33-G-1) NSR Air Quality Permit 2195-F-R3 was issued on May 28, 2008. This revision included a change to the kilowatt-hour (kWh) monitoring for the generator. The new condition, 4.a., reads: "The permittee shall record the kilowatt-hours produced by Unit TA-33-G-1 on a daily basis and on a monthly rolling 12-month total basis." A kWh tracking form has been created and will be used for tracking generator start and stop times as well as daily kWh. These daily readings will be used in tracking the 12-month rolling kWh total. These records are available on-site for NMED inspection. This change has also been requested as part of our Operating Permit Renewal Application submitted earlier this year.
- 2.7.4.1 LANL uses 40 CFR Part 60, Appendix A, Method 9 to determine opacity compliance.

Attachment 6 Internal Combustion Generator Hours of Operation

2008 Generator Hours

			First 6 Month Readings			Second 6 Month Readings							
T.A	Bldg	Manufacturer	MODEL	ĸw	Fuel Type	Previous Reading Date	Previous Reading	6 Month Reading Date	Reading	Hours Run	12 Month Reading Date	Reading	Hours Rui
3	40	Onan Sons	1500DVE15R31374B	150	Diesel	Dec-08	6.6	Jun-08	11.8	5.2	Dec-08		
3	223	Onan Sons	45.0EM-15R/10742D	45	Propane	Dec-08	489.5	Jun-08	492.5	3.0	Dec-08		35/12/6
3	440	Cummins	500FDR5051	260	Diesel	Dec-08	121.8	Jun-08	121.8	0.0	Dec-DS	MILLIANS	No les alle
3	440	Cummins	DFGA-5005210	500	Diesel	Dec-08	81.8	Jun-08	93.8	12.0	Dec-D8		0.40
3	1076	Cummins	DGBB-5601289	35	Diesel	Dec-08	129.7	Jun-08	141.2	11.5	Dec-08		A DOWN
3	1400	Cummins	DFEH-5699616	400	Diesel	Dec-08	33.0	Jun-08	37	4.0	Dec-D8		1, 60,64
3	1404	Cummins	DFLC-5554001	1250	Diesel	Dec-08	336.5	Jun-08	368.4	31.9	Dec-08	NAME OF TAXABLE	Brack Co.
3	1498	Caterpillar	SR-4	600	Diesel	Dec-08	326.0	Jun-08	331.0	5.0	Dec-08	Starting)	Mary M
3	2322	Onan Sons	DGDA-5005757	80	Diesel	Dec-08	339.8	Jun-08	352	12.2	Dec-08	0.00	New York
18	980	Cummins	KTA50-G2	1100	Diesel	Dec-08	293.4	Jun-08	305.2	11.8	Dec-08	los de la companya de	
18	1374	Onan Sons	6DENA	. 6D	Nat. Gas	Dec-08	1092.9	Jun-08	1115.8	22.9	Dec-08		TO SERVICE
18	31	Onan Sons	275DFML29807N	275	Diesel	Dec-08	180.8	Jun-08	180.8	0.0	Dec-08	The state of	RESULT IN
35	2	Onan Sons	100DGDB	100	Diesel	Dec-08	115.5	Jun-08	115.5	0.0	Dec-08	TO SERVICE STATE	
35	402	Cummins	DGCB-5674244	6D	Diesel	Dec-08	138.4	Jun-08	158.0	19.6	Dec-08		
13	1	Cummins	4BT3.9-GC	50	Diesel	Dec-08	383.9	Jun-08	387.7	3.8	Dec-08	THE PARTY OF THE PARTY	and a
13	1	Onan Sons	DVE	150	Diesel	Dec-08	620.0	Jun-08	644.4	24.4	Dec-08		
16	335	Onan Sons	300DEFCB	300	Diesel	Dec-08	959.5	Jun-08	995.4	35.9	Dec-08	State State	Sept.
48	45	Onan Sons	DFCB-5740130	300	Diesel	Dec-08	53.5	Jun-08	69.5	16.0	Dec-08	March 1995	- C. C. C. C.
50	37	Cummins	680FDR5059FF	500	Diesel	Dec-08	502.9	Jun-08	502.9	0.0	Dec-08		Call Section 1
50	184	Onan Sons	DGFA-568741	150	Diesel	Dec-08	212.7	Jun-08	238.6	25.9	Dec-05	ST. Balling	
50	188	Onan Sons	L940563879	1250	Diesel	Dec-08	149.0	Jun-08	149.0	0.0	Dec-08		De la la
53	1	Onan Sons	6DENA	60	Nat. Gas	Dec-08	1234.1	Jun-08	1281.2	27.1	Dec-08	action of the	The sale of
53	2	Kato Eng.	Kamag-14	50	Diesel	Dec-08	194.3	Jun-08	194.3	0.0	Dec-08		n references
3	3N	Onan	15.0JC-18R	15	Propane	Jun-08	345.3	Jun-08	345.3	0.0	Dec-08		T No.
4	412	Olympian	95M-07874-F	500	Diesel	Dec-08	317.9	Jun-08	324.7	8.6	Dec-08	Carl Comment	19.00
55	5	Kohler	100RZ71	100	Propane	Dec-08	79.3	Jun-08	93.4	14.1	Dec-08	To Marine	
5	8	Delco/Detroit	E7014DD	600	Diesel	Dec-08	822.2	Jun-08	831.8	9.6	Dec-08	10 E & TA	SEA.
5	364	Onan Sons	1250DFLC-4987	1250	Diesel	Dec-08	82.8	Jun-08	101.3	18.5	Dec-08	STATE WAR	
55	28	Onan Sons	40DL6T	40	Diesel	Dec-08	66.5	Jul-08	72.4	5.9	Dec-08	(2,4 (1) ()	S LOOK
5	47	Onan Sons	1465	200	Diesel	Dec-08	540.0	Jul-08	555.5	15.5	Dec-08	Jan .	
5	142	Cummins	DFEB-4963414	400	Diesel	Dec-08	105.0	Jul-08	114.8	9.8	Dec-D8		No. Line
19	1	Allis Chalmers	2884-0703	90	Diesel	Dec-08	750.0	Jul-08	750.0	0.0	Dec-08		F181877
50	yard	Cummins	DFHD-4964979	1000	Diesel	Dec-08	648.4	Jun-08	649.4	1.0	Dec-08		
33	93	Murphy	3166-0084	30	Diesel	Dec-08	716.0	Jul-08	718.0	0.0	Dec-DS		1000
4	1	Onan Sons	250DVG	250	Diesel	Dec-08	188.9	Jul-08	171.8	4.9	Dec-DS	W. 18-7	A LONG
39	33	Cummins	DFLC-5568730	1250	Diesel	Dec-08	71.3	Jul-08	78.6	7.3	Dec-08	50 A 157 Select	To (Figure
		Generators in u						55. 50	TOTAL	365.6	200	TOTAL	0.0

N/R = Not Read First half average hours per unit 10.2 Second half average hours per unit

2.8 Data Disintegrator

- 2.8.4 Emissions Monitoring
- 2.8.4.1 The permittee shall maintain a log of the number of boxes of media that are destroyed and calculate the emissions on a semiannual basis in accordance with Condition 4.1. This condition is pursuant to 20.2.70.302.C NMAC.
- 2.8.4.2 The permittee shall perform regular maintenance and repair on the cyclone and cloth tube filter(s) per manufacturer's recommendations. This condition was brought forward from NSR Permit No. 2195H Condition 1.d.

Reporting Requirement

- 2.8.6 Report shall be submitted in accordance with conditions 4.1 and 4.2.
- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ Yes	Date report submitted:	Tracking Number:	

No Provide comments and identify any supporting documentation as an attachment.

Comments:

- 2.8.4.1 LANL maintains a log of the number of boxes of media that are shredded and calculates the emissions on a semi-annual basis. The actual number of boxes shredded during this reporting period is included in **Attachment 7**.
- 2.8.4.2 The Data Disintegrator and associated pollution control devices are maintained under a preventative maintenance contract. LANL maintains documentation of all maintenance and repairs performed on the cyclone and cloth tube filters. This documentation is available on-site for NMED inspection.

Attachment 7 Data Disintegrator Box Throughput

2008 TA-52 Data Disintegrator

	Data Entry		Data Entry
Month	Boxes ^(o) Shredded	Month	Boxes ^(c) Shredded
January	876	July	
February	761	August	
March	840	September	Name de la Haria de la Maria
April	657	October	
May	837	November	description th
June	567	December	
6 mo. Total:	4,538	6 mo. Total:	0

Annual Boxes: 4,538

2.9 Power Plant at Technical Area 3 (TA-3-22)

- 2.9.4.1 Total fuel oil consumption shall be monitored so that combined fuel oil usage of Units TA-3-22-1, TA-3-22-2 and TA-3-22-3 can be calculated on a rolling 365-day total. This condition was brought forward from NSR Permit No. 2195BM1, Condition 3.a.
- 2.9.4.2 Natural gas consumption shall be monitored so that combined natural gas usage of Units TA-3-22-1, TA-3-22-2 and TA-3-22-3 can be calculated on a rolling 365-day total. This condition was brought forward from NSR Permit No. 2195BM1, Condition 3.b.
- 2.9.4.3 Natural gas consumption shall be monitored so that natural gas usage for Unit TA-3-22 CT-1 can be calculated on a rolling 365-day total. This condition was brought forward from NSR Permit No. 2195BM1, Condition 3.f.
- 2.9.4.4 A certification of total sulfur content of the No. 2 fuel oil used by Units TA-3-22-1, TA-3-22-2 and TA-3-22-3 shall be obtained from the supplier whenever No. 2 fuel oil is delivered to the facility. This condition was brought forward from NSR Permit No. 2195BM1, Condition 3.c.
- 2.9.4.5 If the certification as specified by Condition 2.9.4.4 is not available at delivery, the permittee shall analyze the No. 2 fuel oil to determine the total sulfur content. The analysis shall be conducted using Department approved methods and standards for determining total sulfur content of No. 2 fuel oil. This condition was brought forward from NSR Permit No. 2195BM1, Condition 3.d.
- 2.9.4.6 The operating load of Unit TA-3-22 CT-1 specified by Condition 2.9.3.7 shall be monitored and recorded hourly during normal operations of that unit. Periods of startup and shutdown shall not be included in the hourly monitoring but shall be recorded separately. This condition was brought forward from NSR Permit No. 2195BM1, Condition 3.e.
- 2.9.4.7 Compliance with NOx pound per hour emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the daily total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.1029 pounds NOx per thousand SCF of gas burned (applicable for worst-case conditions of negative 18 degrees Fahrenheit) and divided by the number of hours of operation of the unit during that day as recorded pursuant to Condition 2.9.3.8. Compliance with NOx annual emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the 365 day total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.1029 pounds NOx per thousand SCF of gas burned (applicable for annual average conditions of 47.9 degrees Fahrenheit). This condition was brought forward from NSR Permit No. 2195BM1, Condition 3.g.
- 2.9.4.8 Compliance with CO pound per hour emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the daily total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.731 pounds CO per thousand SCF of gas burned (applicable for worst-case conditions of negative 18 degrees Fahrenheit), and divided by the number of hours of operation of the unit during that day as recorded pursuant to Condition 2.9.3.8). Compliance with CO annual emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the 365 day total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.0613 pounds CO per thousand SCF of gas burned (applicable for annual average conditions of 47.9 degrees Fahrenheit). This condition was brought forward from NSR Permit No.

2195BM1, Condition 3.h.

- 2.9.4.9 At least once each calendar quarter the permittee shall use the method specified in Conditions 2.9.4.7 and 2.9.4.8 to determine compliance of Unit TA-3-22 CT-1 with the hourly and annual emission limits specified in this permit. This condition was brought forward from NSR Permit No. 2195BM1, Condition 3.i.
- 2.9.4.10 Visible emissions from stationary combustion equipment shall not equal or exceed an opacity of 20%. Use of pipeline quality natural gas fuel as defined in Conditions 2.9.3.1 and 2.9.3.4 constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20%. At such time as No. 2 fuel oil as defined in Condition 2.9.3.1 is used, opacity shall be measured in accordance with the procedures at 40 CFR 60, Appendix A, Method 9. Opacity measurements shall continue on a quarterly basis per calendar year for each effected unit until such time as pipeline quality natural gas is used. This condition is pursuant to 20.2.61 NMAC and NSR Permit No. 2195BM1, Condition 2.c.
- 2.9.4.11 Initial compliance tests are required on Unit TA-3-22 CT-1 for NOx and CO. These tests shall be conducted within sixty (60) days after the unit achieves the maximum normal production. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source. The tests shall be conducted in accordance with EPA Reference Methods 1 through 4, Method 7E for NOx, and Method 10 for CO contained in CFR Title 40, Part 60, Appendix A, and with the requirements of Subpart A, General Provisions, 60.8(f). Alternative test method(s) may be used if the Department approves the change. The permittee shall submit a testing protocol to the Department at least thirty (30) days prior to the test date, and provide notification to the Department at least thirty (30) days prior to the test date. This condition was brought forward from NSR Permit No. 2195BM1, Condition 6.b and General Condition 13.
- 2.9.4.12 The permittee shall comply with fuel sulfur monitoring requirements at 40 CFR 60.334(h) applicable to Unit TA-3-22 CT-1 by making the required demonstration which shows the fuel combusted in the turbine meets the definition of natural gas at 40 CFR 60.331(u).

The conditions of Section 2.9.4 are pursuant to 20.2.70.302.C NMAC.

Reporting Requirement

- 2.9.6 Reports shall be submitted in accordance with conditions 4.1 and 4.2.
 - This condition is pursuant to 20.2.60.302.E NMAC.
- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ Yes	Date report submitted: Tracking Number:
⊠ No	Provide comments and identify any supporting documentation as an attachment.
Comme	nts:
2.9.4.1	Total fuel oil consumption is monitored on a daily basis. These daily readings are used to calculate a 365-day rolling total. Attachment 8 contains a summary of monthly fuel oil consumption. Records of daily fuel oil use are available on-site for NMED inspection.
2.9.4.2	A volumetric flow meter is used to measure the total amount of natural gas used on a daily basis. These daily readings are used to calculate a 365-day rolling total. Attachment 8 contains a summary of monthly natural gas usage. Daily totals are available on-site for NMED inspection.
2.9.4.3	The Combustion Turbine started operation on September 23, 2007. A monthly gas consumption report, containing daily turbine gas use, is generated by the plant operator. This data is used to calculate a rolling 365-day total. See Attachment 9 for the daily and rolling 365-day totals.
2.9.4.4	No fuel oil was purchased or delivered during this reporting period.
2.9.4.5	No fuel oil was purchased or delivered during this reporting period.
2.9.4.6	A tracking log was created that contains the hours of start-up, normal operation, shut-down, and the hourly operating load during normal operation. The turbine did not achieve "normal" operation during this reporting period. The combustion turbine has run less than 12 hours for this reporting period due to equipment problems. The tracking logs are available on-site for NMED inspection.
2.9.4.7	An emission calculation spreadsheet was created, using the formula in this permit condition, to calculate the NOx pound per hour and ton per year emission rates. This data is compared with the permit emission limits.
2.9.4.8	An emission calculation spreadsheet was created, using the formula in this permit condition, to calculate the CO pound per hour and ton per year emission rates. This data is compared with the permit emission limits.
2.9.4.9	Daily gas use data is entered into the above mentioned spreadsheet on a monthly basis. The spreadsheet uses the required calculation to provide both NOx and CO hourly and annual emissions. The resulting data is used to determine compliance with emission limits.
2.9.4.10	LANL uses 40 CFR Part 60, Appendix A, Method 9 to determine compliance with the opacity limitation. Delivery of pipeline quality natural gas is specified in the transportation contract with the supplier. Opacity measurements performed at the Power Plant are provided in Attachment 10 .
2.9.4.11	An initial compliance test was performed on the combustion turbine within 60 days following the unit achieving maximum normal production. The unit achieved its maximum normal

production rate on September 27, 2007, and the compliance test was performed on October 5, 2007. The test report was provided to NMED on October 22, 2007. The test consisted of the

EPA test methods identified in this permit condition.

2.9.4.12 The natural gas used by the combustion turbine meets the definition of natural gas in 60.331(u). The sulfur monitoring requirement is met under 40 CFR 60.334(h)(3)(i), which allows the use of a current and valid transportation contract that specifies the maximum total sulfur content is 20 grains per100 scf or less. The transportation contract specifies a sulfur content not to exceed 2 grains of total sulfur per 100 scf. A copy of the transportation contract is available at the facility.

Attachment 8 Power Plant Natural Gas and Fuel Oil Usage

TA-3 Power Plant Fuel Use Totals 2008 (Data Entry)

	TA-3 Power Flant Fuel Ose Totals 2000 (Data Entry												
			DATA	ENTRY									
	Boiler #1 (E	ower Plant ^b dgemoor Iron MMBTU/hr)	Boiler # 2 (Ed	ower Plant ^b dgemoor Iron MMBTU/hr)	Boiler # 3 (Uni	ower Plant ^b on Iron Works, BTU/hr)	Monthly Totals						
Month	Natural Gas	Fuel Oil (gallons) ^a	Natural Gas	Fuel Oil (gallons) ^a	Natural Gas	Fuel Oil (gallons) ³	Natural Gas (MMCF) ^a	Fuel Oil (gallons) ^a					
January	6,912	328	63,171	0	1,108	0	71.191	328					
February	19,497	493	34,960	0	3,618	. 0	58.075	493					
March	617	603	50,578	0	866	384	52.061	987					
April	0	0	37,023	219	4,276	0	41.299	219					
May	0	0	23,792	0	7,242	331	31.034	331					
June	148	55	11,048	0	9,920	0	21.116	55					
July													
August													
September													
October													
November													
December													
Annual Totals:	27,174	1,479	220,572	219	27,030	715	274.776	2413					
Jan June	27,174	1,479	220,572	219	27,030	715	274.776	2413					
July - Dec.	0	0	0	0	0	0	0.000	0					

Attachment 9 Daily and Rolling 365-Day Gas Use Totals

			2008	B Dail	y Tu	rbine	Gas	Use	(MC	F), 3	65 D	ay Ro	olling	Tot	al Ga	s Us	e, &	Hou	rs of	Ope	ratio	n		
	J	an	F	eb	M	lar	А	pr	M	lay	J	un	J	ul	Α	ug	S	ер	C	oct .	N	ov	D	ec
Day	Gas Use	Hours	Gas Use	Hours	Gas Use	Hours	Gas Use	Hours	Gas Use	Hours	Gas Use	Hours	Gas Use	Hours	Gas Use	Hours	Gas Use	Hours	Gas Use	Hours	Gas Use	Hours	Gas Use	Hours
1	0	0	0	0	0	0	0	0	0	0	0	0												
2	0	0	0	0	0	0	0	0	0	0	0	0												
3	0	0	0	0	0	0	0	0	0	0	0	0												
4	0	0	0	0	0	0	0	0	0	0	42	1												
5	0	0	0	0	0	0	0	0	0	0	70	0.75												
6	0	0	0	0	8	0.75	0	0	0	0	0	0							i					
7	0	0	0	0	5	0.5	0	0	0	0	0	0							Ī					
8	0	0	0	0	16	1.1	0	0	0	0	0	0												
9	0	0	0	0	0	0	0	0	0	0	0	0												
10	0	0	0	0	0	0	0	0	0	0	0	0			_									
11	0	0	0	0	0	0	0	0	0	0	0	0			_		_		_		_			
12	0	0	0	0	0	0	0	0	0	0	0	0					_		_	-	_			-
13	0	0		0		0	0	0	0	0	0	0	-			_	_	_	-					-
14	0	0	0	0	0	0	0	0	5	0.5	0	0			-	-	-		_	-	-		-	-
15	_		0	0	0	0	0	0	110	2.5	0	0			-	-	_		_		-			-
16	0	0	0	0	0	0	0	0	0	0	0	0	-		├		_		_	-				
17	0	0	0	0	0	0	0	0	0	0	0	0	<u> </u>			-	-	-	_	-		-		-
18 19	0	0	0	0	0	0	0	0	0	0	301	2.3	-				-	_	-	-	-			-
20	0	0	0	0	0	0	0	0	0	0	0	0				-		-		-				-
21	0	0	0	0	0	0	0	0	0	0	0	0	-	-	_	-	-		-	-			-	-
22	0	0	0	0	0	0	0	0	0	0	0	0												
23	7	1	0	0	0	0	0	0	0	0	0	0												
24	3	1.5	0	0	0	0	0	0	0	0	0	0												
25	0	0	0	0	0	0	0	0	0	0	0	0												
26	0	0	0	0	0	0	0	0	0	0	0	0												
27	0	0	0	0	0	0	0	0	0	0	0	0												
28	0	0	0	0	0	0	0	0	0	0	0	0								_				
29	0	0	0	0	0	0	0	0	0	0	0	0	_		_				_	-				
30	0	0			0	0	0	0	0	0	0	0						CHICO II		-		Net No	-	-
SUM		2.5	0	0	29	2.35	0	0	115	3	413	4.05	0	0	0	0	0	0	0	0	0	0	0	0
-	The same of the same of	lalf Ga	THE REAL PROPERTY.	-	67	MCF	THE RESERVE	cond F	and the same of	CONTRACTOR OF THE PERSON	Section 1	0	MCF	U	Ann	ual Ga			67	MCF	- 0	U	U	U
	. 11-54 1					.mer			00		-	-			7 11 11 1					rolling				

The SCFH value (fuel flow rate) in the cell equation is from the compliance test report (223620 SCFH or 223.6 MSCFH)

Permit Limit (365 day rolling total): 646 MMSCF

Attachment 10 Power Plant Opacity Reports

Summary Table, Reports Attached

Source	Date	Time	Average Opacity (a)
TA-3-22 Power Plant	01-15-08	10:00 am	0.25%
	02-12-08	11:00 am	0%
	03-04-08	11:13 am	0%
	03-04-08	11:47 am	0%
	03-18-08	11:33 am	0%
	03-25-08	09:56 am	0%
	04-15-08	10:20 am	0.75%
	04-15-08	10:42 am	0.875%
	05-14-08	08:44 am	0%
	05-14-08	10:03 am	0%
	05-22-08	10:14am	0%
	June 2008	N/A	(b)

- (a) Average opacity for the Power Plant is the sum of the highest consecutive 40 readings divided by 40 (10 minutes of readings). The method is in accordance with EPA Method 9 and 20.2.61 NMAC.
- (b) There were no visible emission observations taken in June due to boiler certifications.

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LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

VISIBLE ENIISSION OBSERVA			HAINE		er.	End Time
Source Name:	Observation Da	-		Start '	lime	End Time
Power Plant at TA-3	1-1	5-0	8	10	00	1010
Source Location:	Sec					
TA-3-22 Type of Source Type of Control Equipment	Min	0	15	30	45	Comments
Type of Source Type of Control Equipment Boiler # / No Particulate Control	1	0	0	0	0	
Describe Emission Point (Top of stack, etc.)	2	0	0	0	0	
TOP OF Boiler#1 Stack Height Above Ground Level Height Relative to Observer	3	0	0	0	0	
15D Feet 140 Feet	4	0	0	5	5	299 37
Distance From Observer Direction of Source From Observer	5	0	0	0	0	
200 Feet ENE			0_	0		
Description of Plume (stack exit only) Monthing □Trapping □Looping □Fanning □Coning □No Plume Present	6	0	2	0	0	
Emission Color Plume Type	7	0	0	2	0	
Black Continuous Fugitive Mintermittent Water Droplets Present?	8	0	0	0	0	
DNO DYES If YES, droplet plume is DAttached Detached	9	0	0	0	0	
At what point in the plume was opacity determined?	10	0	D	0	0	
Describe Background (i.e. blue sky, trees, etc.)	11					
Blue Sku	12	A COLUMN				
Blue Glear	13					
Wind Speed Wind Direction (provide from/to, i.e. from North to South)	14					
From NE	-					
Ambient Temperature 75 Relative Humidity 75 YZ %	15					
Additional Comments/Information:	16			674		
Fuel Oil burn exercise	17					
nuel on bush zinci-	18					
	19					
Stack SOURCE LAYOUT SKETCH	20					
Plume Draw Arrow in North Direction	Average 10-M					f Opacity Readings
Sun Point	0.2	59	6	,	VIII.	6 Max. 50/0
$w_{\text{ind}} \longrightarrow (\overline{X})$	OBSERVER	(please	print)	****		
	Name:	4	<u> </u>		Title:	Acres
·	Signature	-0/2	2MG	dan men	-4	Date
·	(1)		L			1-15-08
	Observer Org	anizatio	الأمي	Me		1-17-118
	1251					
OBSERVER'S POSITION	Certified by				I	Certification Date
140°	ETA					8-29-07
SUN LOCATION LINE						

ENV-EAQ-307, R3, ATTACHMENT 3 (OPACITY DETERMINATION AND EXCESS EMISSIONS REPORTING)



LOS ALAMOS NATIONAL LABORATORY (LANL) VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name:		11	Observation Da	le.		Start	l'ine	End Time
	int at TA-3	П	2-12.	-08	7	110	00	1110
Source Location:	-3-22		Sec Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	Ш	1					Comments
Boiler # /	No Particulate Control	Ш	***********	0	0	0	0	and the second
Describe Emission Point (Top of	stack, etc.)		2	0	0	0	0	
Top of Boiler 4 Height Above Ground Level	Height Relative to Observer	H	3	0	0	0	0	
150 Feet	12/03 Feet	Ш	4	0	0	0	0	A - 47
Distance From Observer 70 Yards	Direction of Source From Observer		5	0	0	0	0	
Description of Plume (stack exit	TV W-ENE	H	6	-			0	
□Lofting □Trapping □Loop		П		0	0	0	0	The second section
Espission Color Plume 1	ype Pro Plume Present	11	7	0	2	0	0	
Water Droplets Present?	naous in rugiuse in meannaean	-	8	0	0	0	0	
	ume is DAttached DDetached	П	9	0	0	0	D	
At what point in the plume was o		11	10	0	0	0	0	
Describe Background (i.e. blue &	D bt Stack (y, trees, etc.)	$\ $	11					
Blue sky			12					
Background Color BLUE Wind Speed, Wind D	Sky Conditions	П	13					
Wind Speed Wind D	irection from/to, i.e. from North to South)	Ш	14					Market Co. Co. St. C. C.
	om E							
Ambient Temperature	Relative Humidity 50 %		15					MITTERS AND
Additional Comments/Information		11	16					
Fuel DIL BURN #	Ser/1505	П	17					
		П	18					
		$\ $	19					Transition of the state of the
Stack SOURCE	LAYOUT SKETCH	1	20					
with Q Plume	Draw Arrow in North Direction		Average 10-N	linute (Opacit			of Opacity Readings
Sun 🕁	Point		0	%		13	Min.	10 00 lo
Wind -	\bigcirc	П	OBSERVER	please	print)			
		П	Name:	Sta			Title:	
		4	Signature	2101	ne		EMS	Date
		П	Along	4	L			2-12-08
			Observer Org	arrizati	Oll			-,
	ADGERNAL PROPERTY.		KSL					Carrie V 5
	OBSERVER'S POSITION	$\ $	Certified by					Certification Date
	140		ETA					8-29-07
SUNTO	CATION LINE	1						

ENV-EAQ-307, R3, ATTACHMENT 3 (OPACITY DETERMINATION AND EXCESS EMISSIONS REPORTING)

VISIBLE EMISSION OBS							
Source Name:		Observation Da		,III.	Start 1	Fime	End Time
Source Location:	lant	3-4-	05	1	11	13	1123
TA-3-22		Min Sec	0	15	30	45	Comments
Boiler 1 No Particulate C	+ 1	1	0	0	0	0	
Describe Emission Point (Top of stack, etc.)	Detroll	2	0	0	0	0	
Top of boyled Stack Height Above Ground Level Height Relative to Observer		3	0	D	D	D	
150 Feet 140 Feet		4	0	0	0	0	
Distance From Observer ZOO Feet Direction of Source From Observer ENE	ŧr	5	D	D	D	0	
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fauning □Coning		6	0	0	0	0	
SNo Plume Present Emission Color Plume Type Pro Plume Present		7	0	0	0	0	
N/A □Continuous □ Fugitive □ Intermitter	ut -	8	0	0	0	0	
Water Droplets Present? \$7.00 □YES If YES, droplet plume is □Attached □Detached		9	0	0	0	0	
At what point in the plume was opacity determined?	,	10	0	0	0	0	******
Describe Background (i.e. blue sky, trees, etc.)	K	11					
Background Color Sky Conditions		12					
Background Color Sty Conditions Wind Speed Wind Direction		13					
5-8 mph (provide from/to, i.e. from North to South)		14					
Ambient Temperature Relative Humidity		15					
36°F 34%		16					
Additional Comments Information:		17					
fuel oil burn exercise		18					
		19					
Stack SOURCE LAYOUT SKETCH		20					
with O Plume Draw Ar North Di		Average 10-M	innte C	pacity			f Opacity Readings
Sun Die Emission North Die Point)	0	9/0	,	2	din.	Max.
Wind —	\vee	OBSERVER ()	please	print)		Title:	5
		11	Ton	e		Eng	3148er 3-4-08
		1-)m	6	1			2 1/200
		Observer Orga	upizatio	211			1-708
OBSERVER'S POSITION		KSL Certified by					Certification Date
140°		ETA					Z-27-108
SUN LOCATION LINE		0/10					~ UB

LOS ALAMOS NATIONAL I						
Source Name:	Observation Da		LINE	Start	Time	End Time
TA-3-22 Power Plant	3-4.	08	7	110	47	1157
Source Location:	Sec Min	0	15	30	45	Comments
Type of Source Type of Control Equipment	1	0	D	0	0	
BOILE val No Particulate Control Describe Emission Point (Top of stack, etc.)	2	0	0	0	0	
Too of hover #1 Stack	3	0	0	0	0	
Height Above Ground Level Height Relative to Observer Feet /40 Feet	4	0	0	0	0	
Distance From Observer Direction of Source From Observer	5	0	0	0	0	
Description of Plume (stack exit only)	6	0	0	_		
□Lofting □Trapping □Looping □Faming □Coning No Plume Present	7			0	0	
Emission Color Plume Type MNo Plume Present Continuous □ Fugitive □ Intermittent	8	0	0	0	0	
Water Droplets Present?	9	0	0	0	0	
ANO DYES If YES, droplet plume is DAttached Detached At what point in the plume was opacity determined?		0	0	0	0	
2) Ist. Appro-topot stack	10	0	0	0	0	
Describe Background (i.e. blue sky, trees, etc.) Blue 5ky						
Backgrand Color Sky Conditions	12					
Wind Speed Wind Direction (provide from North to South)	13					
3.8 From 55E	14					
Ambient Temperature Relative Humidity 3 2 %	15					
Additional Comments/Information:	16					
Fuel Dibburn exercise	17					
10 - 11 (1) (1) (1) (1) (1) (1) (1) (1) (1)	18					
	19					
Stack with O Draw Arrew in	20					
Plune Emission North Direction	Average 10-M	dinute (Opacit			of Opacity Readings
Sim # Point	OBSERVER	(please	print)		0	10 010
Wind - X	Name:	46	ייייין		Title:	gineer
	Signature	20	ije.	,	C-20(0	Date
	Observer Or	5	for	u_		3-4-08
	K41	Santzal	1011			
OBSERVER'S POSITION	Certified by					Certification Date
140	ETA					2-27-08
SUNIOCATION UNE						

LOS Alame			SION OBSERVA						
Source Name:	, haza	IJIJIII IIII	HOLY OBSEICT	Observation		VALLEY	AND DESCRIPTION OF THE PERSON NAMED IN	Time	End Time
TA-3.	22 101	WER Pla	int	3-1	-	28	11	33	1143
	TA-3.	-22		Min	0	15	30	45	Comments
Brilar	#2	Type of Control E	dipment late Control	1	0	0	D	0	
Describe Emiss	ion Point (Top of	stack, etc.)	L 1	2	0	0	0	0	
Height Above (9 4 DO) [Ground Level	Height Relative to O	ACK Observer	3	0	0	0	0	
Distance From	SD Feet Observer	Direction of Source	From Observer	-4	0	0	0	0	
	OD Feet	ENE	a rome world at	5	0	0	0	D	,
□Lofting □I	Plume (stac): exit o Trapping □Loopi		Coning	6	0	0	0	0	
ZNo Plume Pro Emission Color	Phune To	ype DiNo Plume P.		7	0	0	0	0	
Water Droplets		nous D Fugitive	□Intermittent	S	D	0	0	0	
\$200 □YES	If YES, droplet plu	me is □Attached □	Detached	9	0	0	0	0	
At what point in	the phine was op	sacity determined?	- 1	10	0	0	0	0	
	bove to			11					
Background Co	lor /	Sky Conditions		12					10
Wind Speed	Wind Dir			13					
10-15	iph (provide	from/to, i.e. from North	h to South)	14					
Ambient Tempe	erature 7 °F	Relative Final dity	29 %	15					
Additional Com	== - ments Information		-7 °	16					
Fuel 0	12 Buri	N Exercis	25	17			in mile		
				18					
				19					
Stack with	SOURCE	LAYOUT SKET	TCH Draw Arrow in	20					
Plume Sun (1)		mission	North Direction	Average 10.	Minute (Opacity		Range o Min.	of Opacity Readings
Wind —		Peint	(\nearrow)	OBSERVE	c (please	print)		0	10 0/0
				Name:	Ste	6 6	j	Title:	INPET
				Signature	0,0			- meg	Date
			V	Observer O		af to	m_		3-18.08
				KS/	Sunt	JII.			
	-grandere	OBSERVER'S PO	OSITION	Certified by					Certification Date
		140		ETA					2-27.08
	SUN LOC	ATION LINE							

Los Alam			MOS NATIONAL								
Source Name:			_	T	Observation Da			Start T	inte	End Time	
Source Locati	A-3-2:	2 Pow	er Plant		3-2		28		756		
	TH-3	-22			Sec Min	0	15	30	45	Cemme	nts
Type of Somo	# 2	Type of Con	trol Ecuipment	1	1	0	0	0	0	***************************************	
Describe Emi	ction Point (Top of	stack, etc.)	treslate Coste	4	2	0	0	0	0		
TOP S	Of 1501/6 Ground Level	V #3	Stack	4	3	0	0	2	0		
100-00 0000000	150 Feet	•	160 Feet		4	0	0	0	D		
Distance From	250 Feet	Direction of Sc	ource From Observer		5	D	D	0	0		
Description of	Plume (stack exit of Trapping ELcop	nly)	□C ening	٦	6	D	0	0	D		
ZNo Plume P Emission Cold	recent		me Present		- 7	0	D	0	D		
N/A	□Coutin	ueus 🗆 Fugitiv	re		S	0	0	0	0		
Wafer Droplet ₩O DYES	is Present? If YES, droplet plu	une is 🗆 Attached	l □Detacked		9	0	0	0	0		
At what point	in the plume was or	acity determined	et le		10	0	0	0	p		
Describe Back	above of	<i>DD 01</i> y, (cees, etc.)	SIALK	-	11						
Back Egund C	0 5KU	Sky Cenditions			12				1 1		
B/u Wind Speed	Wind Du	clea	2r	4	13						
	mph (provide	from to, i.e. from	Neith to South)		14		Mille		1 1/4		
Ambient Tenr	Fro	Relative Humis	lity	-	15		B1"				
	29		23%		16		3				
	nments Informanos		1000		17						
Tuel c	CPUEN	exer c	1300		18					The state	
					19			- 8:			
Stack:	SOURCE	LAYOUT SI	KETCH	٦١	20				CIV.		T
Plune	.		Draw Arrew in	Ш	Average 10-M	ionte ()naciry	F	stige of	f Opacity Rea	dings
- de	E:	mistion	North Direction	Ш	0	5 /	1		fun.	O, Max.	0,
Sun 🕁		Point		Ш		10			0	B 8	1/2
Wind		\bigcirc	< (/)	Ш	OBSERVER'	please	print)				
				Ш	Na)me	1			Title:		
			~	Ш	LON	210	DIE	2	<u> Z-4</u>	RINCE	-
					2) Enguine				7	Date	
				\parallel	(d lass	1	1	20		マンど	20
					Street Org	anuzit:		KL_	I,	127	08
		OBSERVER	'S POSITION		KSL Certified by					Certification	Data
1	a	100	e maniel Total Total Total Total		F						20
		<u> </u>	25.		ETA					2-274	08
1	EINIO	TATION LINE		Ι.				-			

Los Alamos LOS ALAMOS NATIONAL				.5		
VISIBLE EMISSION OBSERV.	THE PERSON NAMED IN COLUMN 2 I	*****	HNU	TE)		End Fone
Secure Manuel	Observation D			1		1
TA-3-22 Power Plant	4-15	28		12	20	1030
	Mig. Sec	0	t ?	30	4.5	Comments
TA-3-22- Type of Control Equipment	1					
Boiler #1 1 Proticulate Control		0	14	14	0	
Describe Entreson Pouts Top of stack, etc.;	1 2	0	1)	11)	0	
Top of boyler # Stack Height Robins to Overs	3		T.	(A)	1	
Height Apple Grantid Level Height Reprive to Observer	11	101	0	40	12	Communication Section
140 Feet 140 Feet Distance From Observer Distance Source From Observer	.]] +	0	0	0	0	
	5	0	19	0	0	
ZDD *** ENE	4		0	12	1	
Description of Finance stade extremely: #Loting Disapping Closeping Disapping Coming	6	0	0	0	0	
DNs Plune Present		0	0	0	0	
Entration Co. 3: Plante Type II No Plante Present Description	8					
Witer Drowlett Present		0	10	0	0	
XXXX Extract Taylor plane in Claristical City Countries	9	0	0	0	0	
At what nation in the offices was exacting determined?	10	1		1-3-5-		
FIFT above too of stack	10	10	15	5	0	
Deteribe Bodinground it e. blue shf. trees erc »	11					
Blue SKU	12					A TOTAL OF A STRUCTURE OF THE STRUCTURE
Blue Sky Backgroup Celer Sky Cendgroup Wind Speed Wand Davenian	1	+-+				
Wind Speed Wind Down in	- 13					
パンスの night Aprovide from toure, from North to South	14					
From SW		+				
Andrean Temperature Estative Hamility 10 %	1.5					****
(Q) · (U)	16					
Additional Comments Information	17	1				W-17-17-18-18-18-18-18-18-18-18-18-18-18-18-18-
Fuel D. I. BURN EXERCISES	1.7	-				
act con contract	18					
	19			BENGENAL COL		
	d					
Stack SOURCE LAYOUT SKETCH	20					
TREES ////	Average 10-)	finnte O	pacie	. 17	Constant	Opacity Readings
Sun + Emily Nerib Discourt	0.7	101	4	1:	$^{\mathrm{dim}}$. \mathcal{O}^{6}	9/ 3ias/201
1 2//	White the contract of the cont	The same of the sa				(D 195%
#mi — (Z)	OBSERVER Nähe	- in testable	74 th 1 1		Tule	
T 1	$\prod (\mathcal{D}_{k} \leq$	As 10			Tale:	1 4000
1 7	frignature	1 000	Name I de		The state of the s	Date
			1		1.0	500 Delevi
	1/22	- ⁴ 77	An	L	1	1-15-08
49 St.	Observer On	zafiržatio	ci.			1.5 (21)
	11/1/1		950			
3.00 property (property 10.50) (00.60)	1556					
OBSERVER'S POSITION	Ceratied by				1	Генійскию Вые
A CHILD	ETA				2	27-08
Φ.						- Land

N				· ·		
Los Alamos Los ALAMOS NATIONAL I						
VISIBLE EMISSION OBSERVA	The same of the sa		III		d grunna a s a a	I End Tage
Source Monte:	Observation De	3000		Star	100 A	ALCOHOL STATE
7A-3-22 Power Plant	4-15-	- <i>08</i>		10	42	1052
Source Location	Sec		1.5	30	45	Comment
77-3-22- Type of Source + Type of Control Equipment	Mus	- V	1	372	4-	, v. zminan, s
Boiler#1 1 Restrustate Control	1	5	5	12	0	
Describe Emmison Points Tru of tooks each	2	5	5	_	0	
Top of boyler#/ Stack		J.		 2 -	10	
Hereld Above Ground Level Height Reingress O'xigver	3	0	5	5	0	
150 Feet 140 Feet	4	.0	V:	0	5	
Distance From Objection Direction of Smale From Objection		20	0	10	-62	
ZDD # ENE	5	0	0	0	0	
Description of Physic existingly	6					
Rhoting Transme Cheering Dramme Digning	*******	0	2	0	0	
Engreton Color Plane Type ENo Plane Freien:	Ţ	0	0	0	0	
Black December of Fugues Blacementen	8	0	64	0	0	
Wilder October Present	ļ	12	2	0	0	
Water Droylett Fresenti 2000 CNES II VES, droylet planters Elemented - Effective i	9	0	0	0	0	
At what popul in the plante was opacity determined.	10	0	0	0	0	
2/1-th. above ton et stack	·	2	2/_	Col		
Describe Back ground in e. white sky, trees, etc.)	11.					
Blue Sky	1.2					
1 Date name to the second of the second seco	—			l		
Wire Street Ward Diseases /	13	ļ	ļ	ļ	ļ	
15-25 mph spreade from to ce, from North to South	14					
Trom 24)	15		l			
Applyant Temperature Feliative Humility	1.4		ļ			
	16					
Additional Comments Information	17					
Free Oil Burn Exercises		ļ		-		
	18					
	19					
A STATE OF THE PROPERTY OF THE PARTY OF THE			ORIFICE LINE			
SOURCE LAYOUT SKETCH	20					
Plume 2 Draw Arrew in Nerth Diseased in Nerth Diseased in	Asersge 10-8	finate (Jpacii;			of Opacity Readings
Sao + Renar / A	0,8	75				% Stax 5%
	OBSERVER		priet)			
Sart — (2)	Nigary	1			Title	GINEEY TO
	1DR	212	NP		15-1	GINPEY
	Tolkname.		-1			20:018
	1 10U	_ 4	75/2	سيورست		4-13-28
	Objection Only	anizzk	53	head		· · · · · · · · · · · · · · · · · · ·
	K51					
CBSERVER'S POSITION	Certified by					Certificación Date
100	ETA					2-27.08
A	4/A	-	-	-		4-47-08
SUN LOCATION LINE						

THIS FORM IS FROM E.3 Q-3 θ 7, R4

(T)							
LOS ALAMOS NATIONAL VISIBLE EMISSION OBSERVA							
Scurce Name:	Observation D	PLL	Starr	Time	End Time		
Power Plant at TA - 3	5-14	1-2	8	08	44	0854	
TA-3-22	Min Sec	0	15	30	45	Comments	
Type of Source Type of Centrel Equipment	1	0	0	D	0		
Describe Emission Point (Top of stack, etc.)	2	0	0	n	0		
Top of Bailer#3Stack	3	1	100	n	0		
Height Above Ground Level Height Relative to Observer 156 Feet 170 Feet	1	0	0	0	0		
Distance From Observer Direction of Source From Observer	5	0	0	0	0	V.	
ZOD Feet NW Description of Plume (stack exit only)	6	0	0	0	0		
OLoghing Olrapping OLooping OFanning OCening	7	10	0	0	0		
Emassion Color Phinie Type WNo Plume Present		0	0	0	0		
Water Droplets Present?	8	10	0	0	0		
#NO DYES If YES, droplet plume is @Attached Detached	9	10	0	0	0		
At what point in the plume was opacity determined?	10	0	0	0	0		
Describe Background (i.e. blue sky, trees, etc.)	11						
Background Color Sky Conditions	12						
Wind Speed Wind Direction	13		inc				
O-4 mph (previde from to, i.e. from North to South)	14	X SAND					
Ambient Temperature Relative Humiday	15						
417 81%	16	103		BATT			
Additional Comments Information: FUEL DIL BURN EXEK-15E 5	17						
MECUICOUPN EXECUSES	18		10.3		12320		
	19						
Stack SOURCE LAYOUT SKETCH	20	esta(g)					
Stack with O Plume SOURCE LAYOUT SKETCH Draw Arrow in	Average 10-1	Migute	Opacity	7	Range o	Opacity Readings	
Sun (Emission North Direction Point	4	91	100		Mm.	of Max de	
Wind	OBSERVER	(please	print)		0	10 010	
	Don Stone Engineer						
	Signature	101	V.C.		-019	Date	
	Don	5%	on	_		5-14-08	
	Observer Or	Mizati	(on				
OBSERVER'S POSITION	Certified by				T	Certification Date	
140	ETA 2-27-E						
CIDITO OTTOVIDE	to the last of the						

- Los Alamos	*		MOS NATIONAL IISSION OBSERV							
Source Name:	A I	Observation D.		Fina	End Time					
Power Source Location:		5-14-08			Start Time		1013			
7		Min Sec	0	15	30	45	Comments			
Type of Source	A-3.][1	1)	0	0	1			
Describe Emission	41	2	0	0	0	0				
Top of Height Above Groun	Beile	## 3 51	ack	41	3	0	0	0	0	
150	26	Height Relative	170 Feet	li	4	0	0	0	0	
Distance From Obse		Direction of So	xirce From Observer	11	5	0	0	0	0	
Description of Plum Lofting Trapp		nly)		1	6	0	0	0	0	
ano Plume Present Emission Color			me Present	11	7	0	0	0	0	
Water Droplets Press		ucus 🗆 Fugitiv		11	8	0	0	0	0	
XNO DYES IFYE	ent: S. droplet plu	me is □Attached	l □Desched		9	0	0	0	0	
At what point in the				11	10	0	0	0	0	
Describe Backgroun	a (i e. ome se	y, trees, etc.)		11	11					
Background Celer Sky Cenditions				H	12					Karaman and San
White car	Wind Di	Chou	dy	11	13					
4-6 mph (provide from to, i.e. from North to South)					14					
Anabient Temperant	e	Relative Humic	lity	Π	15					大大型是 原列
76	Additional Comments Information:									
Fuel oil	Journa	- odos s	101		17					
T DOC 6	(2000	- yeu	<i></i>	II	18					
				J١	19	10.00				
Stack Stack	OURCE I	LAYOUT SE	KETCH	11	20			10.10		
Plume	E.	ar 1 (4.0%)	Draw Arrow in North Direction	1	Average 10-N	linute (Opacity		lange o	f Opacity Readings Nax.
Sun 🕀		Peint	CP)		0	%			0	% Max. 0%
Wind — OBSERVER (please print) Name:									Title:	
			1	4	Don S Signature	100	10	E	29	Date
					Down Observer Org	Smission	ton	<u></u>		5-14-08
		OBSERVER	'S POSITION	11	K51	0				Certification Date
120		140								Z-27-88
w2	CNIOC	ATION LINE	z k	14				-		5-6-1-00

	TOCATAMOCNATIONAL	LUDODATO	DYT	4 3-Y	v		
- Los Alamos	LOS ALAMOS NATIONAL : ISIBLE EMISSION OBSERVA						
Source Name:	Observation D		Time End Time				
Power Plant a	5-22	5-22-08		1014		1024	
TA-3-2	Min	0	15	30	45	Comments	
Type of Source	No Porticulate Control	1.	0	0	0	0	
Describe Emission Fount (Top of s	tack, etc.)	2	0	0	0	0	
Top of boiley Height Above Ground Level	Height Relative to Observer	3	0	1)	0	0	
150 Feet	170 Feet	-1	0	0	1	0	
Distance From Observer ZDD Feet	Direction of Source From Observer	5	n	0	0)	0	tuit alleanaava tuit aininke ees a P
Description of Piume (stack exit o	nlyj	6	0	0	0	0	
DLofting DTrapping DLoopi BNo Plume Present		7	0	0	0	0	
Entission Color Plume Ty A//A □Contin	pe #No Plume Present nous D Fugnive Olmermittent	8	10	0	0		
Water Droplets Present?	maje Charabad - DDurabad	9	0	0	0	0	
At what goint in the plante was op		10		- delicano	n	0	
2/ft. apove to	op of stack	11	0	0	U	0	REPORTED AND ADDRESS OF THE PARTY OF THE PAR
Describe Background (i.e. blue sk	The Art Parties of the Property of the Control of t	12					
Background Color	Sky Conditions)		-	200 P			
Wind Speed / Wind Di	from to, i.e. from North to South)	13					
18-12 mph (provide	om SE	14					
Ambient Temperature	Relative Humidity	15					f least the second
Additional Comments Information	8/	16					
Ful oil bur	e spercises.	17				Section 1	
		18					
	,	19		TO			
Stack with O	LAYOUT SKETCH	20				al en	
Plume	Draw Arrow in North Direction	Average 10-2	Minute	Opacir			of Opacity Readings
Sin 🕀	Point	1	1/2	2		2	10 0/0
Wind>		OBSERVER Numbe	i (please	prair)		Title:	
		Tignique	NON	e		يماح	Date
,		Han	6	tou	e_		5-22-08
	1	Observer Or	gaparza	iot1			-
	OBSERVER'S POSITION	Certified by	Certification Date				
	140	ETA 2-27-					
\$25.100	ATION LINE						

Part 2

Deviation Summary Report

% ⊠					g.		
☐ Yes			2	200			N
1. Were any deviations reported to the Air Quality Bureau during this reporting period? If NO, answer question 2 below. If YES, complete the "Summary of Deviations Previously Reported" table below, then answer question 2.	SUMMARY OF DEVIATIONS PREVIOUSLY REPORTED	Date deviation reported Tracking Number					
1. Were any deviation below. If YES, cor		Unit # and description					